



"Eric Pastor"
<eric.pastor@pbwllc.com>
05/10/2007 02:25 PM

To Gary Miller/R6/USEPA/US@EPA
cc "Voskov, Luda" <LVOSKOV@tceq.state.tx.us>
bcc
Subject Gulfco Wetland Surface Water Data

Hi Gary –

As we discussed, I am sending this e-mail to summarize our conclusions regarding the nature and extent of chemicals of interest (COI) in surface water within the wetlands north of Marlin Avenue. Section 5.6.6 of the approved RI/FS Work Plan specified the collection of surface water samples from 15 locations (both on-site and off-site) within the wetlands north of Marlin Avenue. As you know, based on our field reconnaissance and subsequent discussions, the number of proposed sample locations was subsequently revised to the six locations (2WSW1 through 2WSW6) shown on the attached Figure 1 due the lack of ponded surface water in the area. These six proposed locations were approved by you via e-mail on December 1, 2006.

Sampling at the proposed locations was performed by Benchmark Ecological Services, Inc. (BESI) on December 6, 2006. As described in BESI's sampling report attached to this e-mail, surface water was not present at sample stations 2WSW4 and 2WSW5 at that time, and in consultation with you, it was determined that neither those locations and nor any alternative locations would be sampled during the event.

Surface water samples were collected from locations 2WSW1, 2WSW2, 2WSW3, and 2WSW6 and analyzed in accordance with the approved plan. Per plan requirements, the validated data from these analyses were compared to the Preliminary Screening Values (PSVs) for surface water specified in Table 20 of the plan. Based on this comparison, the COIs listed in the attached Table 1 were found to exceed their PSVs. These PSV exceedences are plotted on the attached Figure 2.

As shown on Figure 2, PSV exceedences in the surface water samples were limited to copper, mercury, and manganese. The lateral extent of the copper and manganese exceedences noted in Sample 2WSW6 is effectively bound by the extent of surface water within the small area of ponded water south of the former surface impoundments where this sample was collected. The southern extent of copper and mercury in samples 2WSW1 and 2WSW2 north of the Site is defined by sample 2WSW3 where no PSV exceedences were observed. The northern, western, and eastern extent of the copper and mercury in samples 2WSW1 and 2WSW2 is effectively bound by the lateral extent of perennial standing water in these directions (i.e., standing water is not perennially present in these directions). Based on this delineation, no further investigation of wetland surface water is proposed.

Please review this information and let me know if you concur with our conclusions or have any questions/comments.

Thanks.

Eric Pastor
Pastor, Behling & Wheeler, LLC
2201 Double Creek Drive, Suite 4004
Round Rock, TX 78664
(512) 671-3434



www.pbwllc.com Table 1 - Wetlands Surface Water.pdf SW- Figure 1.PDF SW- Figure 2.PDF



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BESI N marsh sediment and water rpt.pdf BESI N marsh sediment and water rpt.pdf

**Table 1 - PSV Exceedences in
Wetland Surface Water Samples**

Sample ID	Collection Date	Parameter	Total or Dissolved	Result (mg/L)	SQL (mg/L)	MDL (mg/L)	PSV (mg/L)
2WSW1-001	12/6/06	Copper	total	0.011J	0.02	0.0025	0.0036
2WSW1-001	12/6/06	Copper	dissolved	0.011J	0.02	0.0025	0.0036
2WSW1-001	12/6/06	Mercury	total	0.00004J	0.0002	0.00004	0.000025
2WSW2-002	12/6/06	Copper	dissolved	0.0053J	0.02	0.0025	0.0036
2WSW2-002	12/6/06	Mercury	dissolved	0.00011J	0.0002	0.00004	0.000025
2WSW2-002	12/6/06	Mercury	total	0.00007J	0.0002	0.00004	0.000025
2WSW6-006	12/6/06	Copper	total	0.0095J	0.01	0.0025	0.0036
2WSW6-006	12/6/06	Copper	dissolved	0.0068J	0.01	0.0025	0.0036
2WSW6-006	12/6/06	Manganese	total	0.34	0.015	0.0006	0.1
2WSW6-006	12/6/06	Manganese	dissolved	0.33	0.015	0.0006	0.1

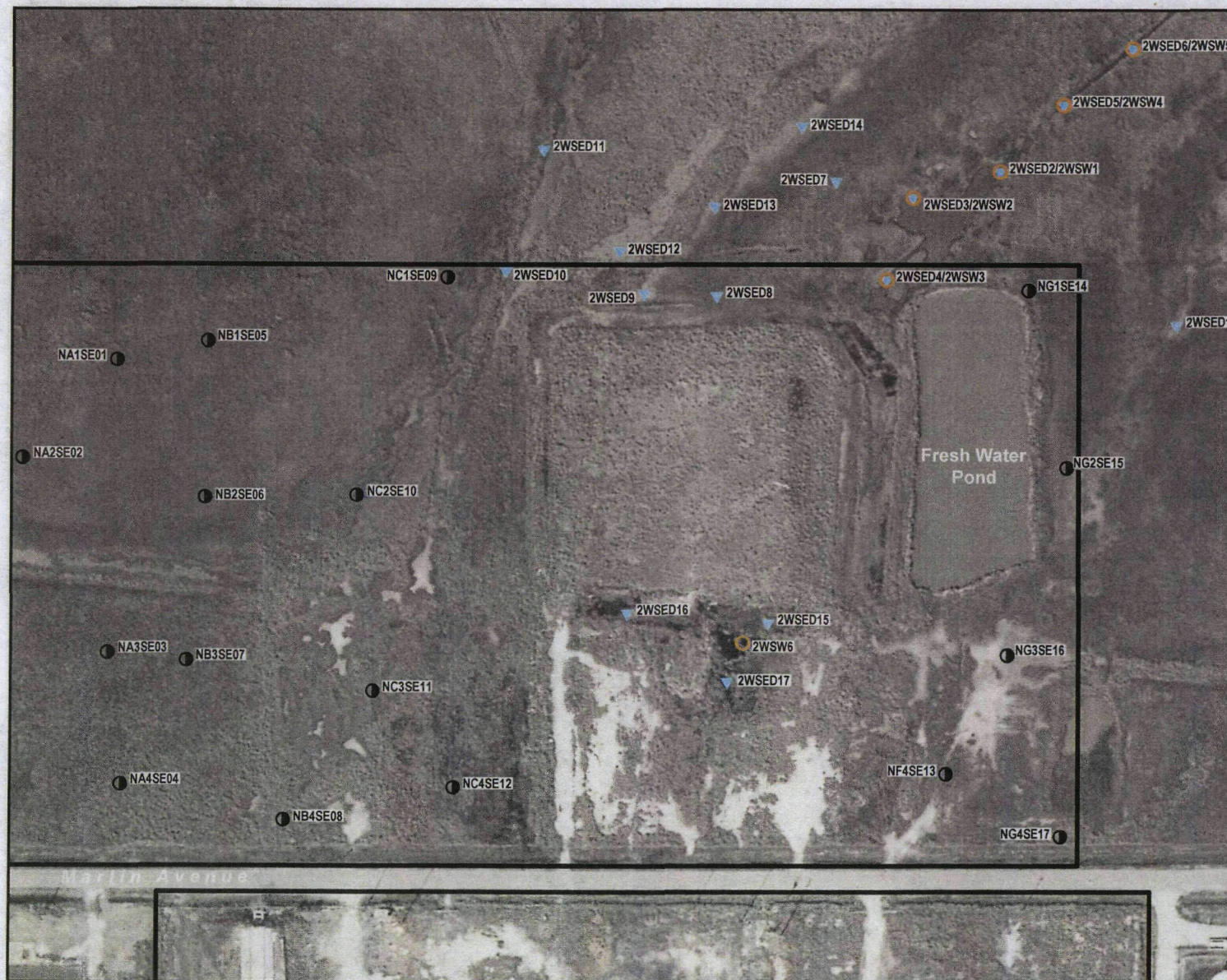
Notes:

SQL = Sample Quantitation Limit

MDL = Method Detection Limit

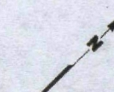
J = Estimated value. Result between MDL and SQL.

PSV = Preliminary Screening Value for Surface Water from Table 20 of RI/FS Work Plan.



EXPLANATION

- Gulfco Marine Maintenance Site Boundary (approximate)
- Proposed Phase 2 Wetland Sediment Sample Location
- Proposed Phase 2 Wetland Surface Water Sample Location
- Sediment Sample Location



Approx. Scale in Feet
0 60 120

Source of photo: H-GAC, Texas aerial photograph, 2004.

GULFCO MARINE MAINTENANCE
FREEPORT, BRAZORIA COUNTY, TEXAS

Figure 1 PROPOSED PHASE 2 WETLAND SEDIMENT/SURFACE WATER SAMPLE LOCATIONS

PROJECT: 1352	BY: ZGK	REVISIONS
DATE: MAY, 2007	CHECKED: EFF	

PASTOR, BEHLING & WHEELER, LLC
CONSULTING ENGINEERS AND SCIENTISTS



EXPLANATION

- Gulco Marine Maintenance Site Boundary (approximate)
- Phase 2 Wetland Surface Water Sample Location

Notes:

- PSV = Preliminary Screening Value.
- Data Qualifiers: J = Estimated value.



Approx. Scale in Feet
0 60 120

Source of photo: H-GAC, Texas aerial photograph, 2004.

GULFCO MARINE MAINTENANCE
FREEPORT, BRAZORIA COUNTY, TEXAS

Figure 2

PHASE 2 WETLAND SURFACE WATER SAMPLE PRELIMINARY SCREENING VALUE EXCEEDENCES

PROJECT: 1352	BY: ZGK	REVISIONS
DATE: MAY, 2007	CHECKED: EFP	

PASTOR, BEHLING & WHEELER, LLC
CONSULTING ENGINEERS AND SCIENTISTS

Benchmark Ecological Services, Inc.

P.O. Box 158
Katy Texas 77492-0158

Phone 281-934-3403
Fax 281-934-3404
E-mail: nhenthorne@benchmarkeco.com

January 16, 2007

Eric Pastor, P.E.
Pastor, Behling, & Wheeler, LLC
2201 Double Creek Dr., Suite 4004
Round Rock, Texas 78664

Subject: Summary of Gulfco Marine Maintenance Superfund Site North Marsh Sediment and Water Sampling Study

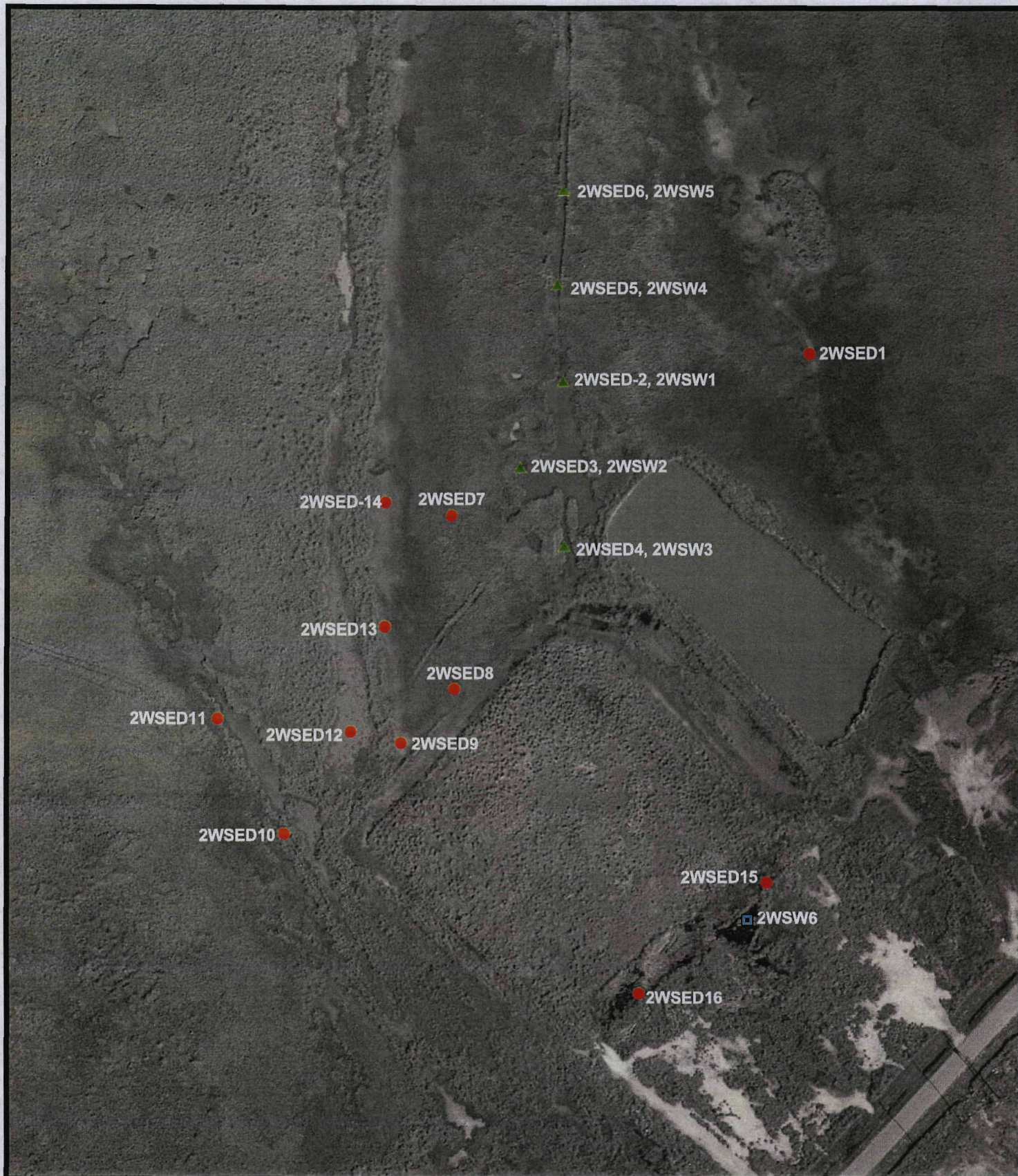
Dear Eric:

Benchmark Ecological Services, Inc. conducted field sampling associated with the Gulfco Marine Maintenance Superfund Site North Marsh Sediment and Water Sampling Study Sediment Study on 6 December 2006. The following report summarizes the sampling event and methods.

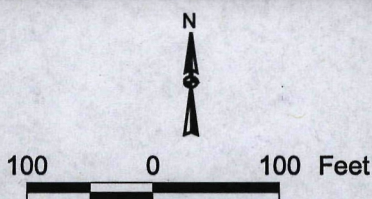
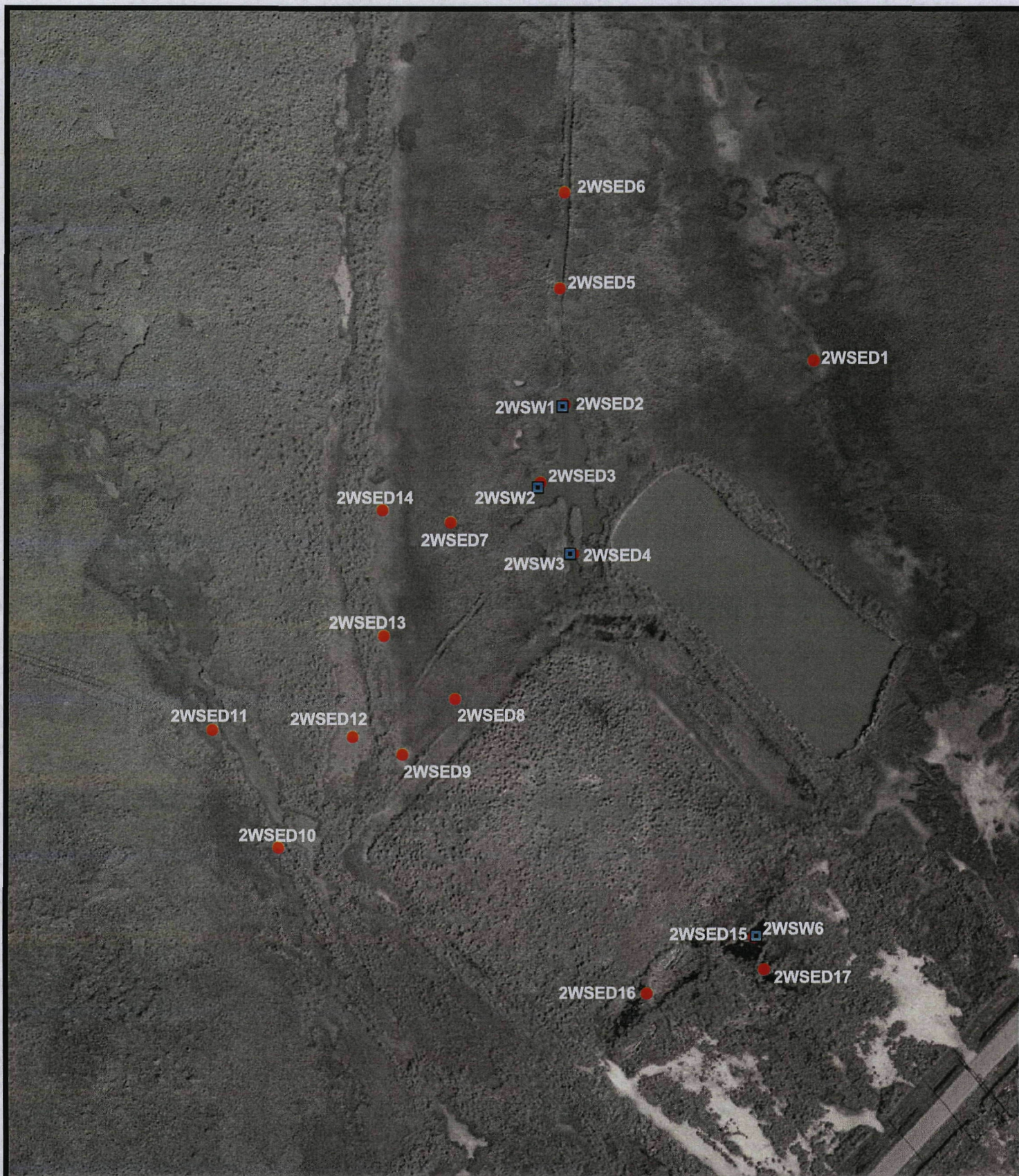
Field Study

The Sampling Analysis Plan (SAP) designated 6 water sample stations and 16 sediment sample stations. Target sample stations as listed in the SAP are shown in Figure 1. Benchmark personnel, Gary Miller with the EPA, and Barry Forsythe with USFWS visited the study area prior to the field sampling event. During this visit it was determined that stations 2WSW5 and 2WSW4 were not inundated with water and would not be sampled for water during the sample event. Gary Miller requested that we add an additional sample station (2WSED17). Sample station 2WSED17 was added just south of station 2WSW6 and is shown in Figure 2. In addition to adding a sample station, the EPA requested that sediment station 2WSED15 shown in Figure 1 be moved to the same coordinates as water station 2WSW6. Figure 2 shows the sediment and water sample stations as visited during the 8 December sample event. Sample stations and coordinates are listed in Table 1.

Water samples were collected using a peristaltic pump and pre-cleaned Teflon and C-flex tubing. Sediment samples were collected using pre-cleaned stainless steel spoons and bowls. All samples were shipped overnight to the analytical laboratory on 6 December 2006 and arrived 7 December 2006.



	<p>Legend</p> <p>Marsh Station</p> <ul style="list-style-type: none"> ● Sediment ▲ Sediment & Water ■ Water 	<p>Notes</p> <p>2004 HGAC</p>	<p>Proposed Marsh Sediment and Water Stations</p> <p>PBW, L.L.C.</p> <p>Gulfco Marine Maintenance Superfund Site</p> <p><small>Project Name: evalm.apr Date: 01/16/07</small></p> <p>BESI Benchmark Ecological Services, Inc.</p> <p>Figure 1</p>
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Legend

- Marsh Stations
- Sediment
 - Water

Notes

2004 HGAC

Marsh Sediment and Water Stations
Sampled December 8, 2006

PBW, L.L.C.

Gulftco Marine Maintenance
Superfund Site



Project Name: Field.apr
Date: 01/16/07

Figure 2

M:\05005\008\Arc\field.apr

Gulfc0 North Marsh Sediment and Water Sampling Study
January 16, 2007

Table 1 - Sample Station Coordinates

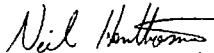
Station_ID	Northing	Easting	Sample Matrix
2WSED6	13555713.607	3154515.677	Sediment
2WSED5	13555603.905	3154511.155	Sediment
2WSED2	13555470.977	3154516.309	Sediment
2WSED7	13555336.390	3154386.069	Sediment
2WSED13	13555207.077	3154309.708	Sediment
2WSED14	13555350.528	3154307.871	Sediment
2WSED10	13554965.049	3154190.081	Sediment
2WSED11	13555098.985	3154114.732	Sediment
2WSED12	13555091.387	3154274.340	Sediment
2WSED8	13555134.933	3154391.348	Sediment
2WSED9	13555071.412	3154331.098	Sediment
2WSED16	13554798.227	3154611.685	Sediment
2WSED1	13555521.099	3154799.742	Sediment
2WSED3	13555381.778	3154489.188	Sediment
2WSED17	13554825.925	3154744.282	Sediment
2WSED15	13554862.977	3154733.086	Sediment
2WSED4	13555300.723	3154526.713	Sediment
2WSW6	13554864.842	3154734.915	Water
2WSW1	13555469.036	3154513.962	Water
2WSW2	13555376.296	3154485.685	Water
2WSW3	13555300.864	3154522.783	Water

Coordinate System: State Plane 1983, Texas South Central, Feet

Thank you for the opportunity to participate in this project. If you have any questions or comments, please call me at 281 934-3403, ext. 113.

Sincerely,

Benchmark Ecological Services, Inc.



Neil Henthorne

Project Manager

Benchmark Ecological Services, Inc.

P.O. Box 158
Katy Texas 77492-0158

Phone 281-934-3403
Fax 281-934-3404
E-mail: nhenthorne@benchmarkeco.com

January 16, 2007

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Subject: Summary of Gulfco Marine Maintenance Superfund Site North Marsh Sediment and Water Sampling Study

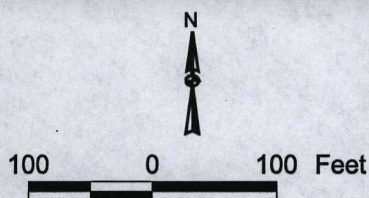
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Legend

- Marsh Station
- Sediment
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Notes

2004 HGAC

Proposed Marsh Sediment
and Water Stations

PBW, L.L.C.

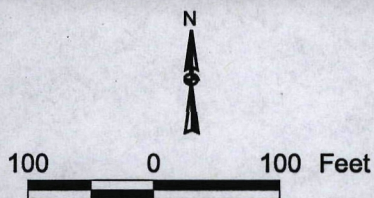
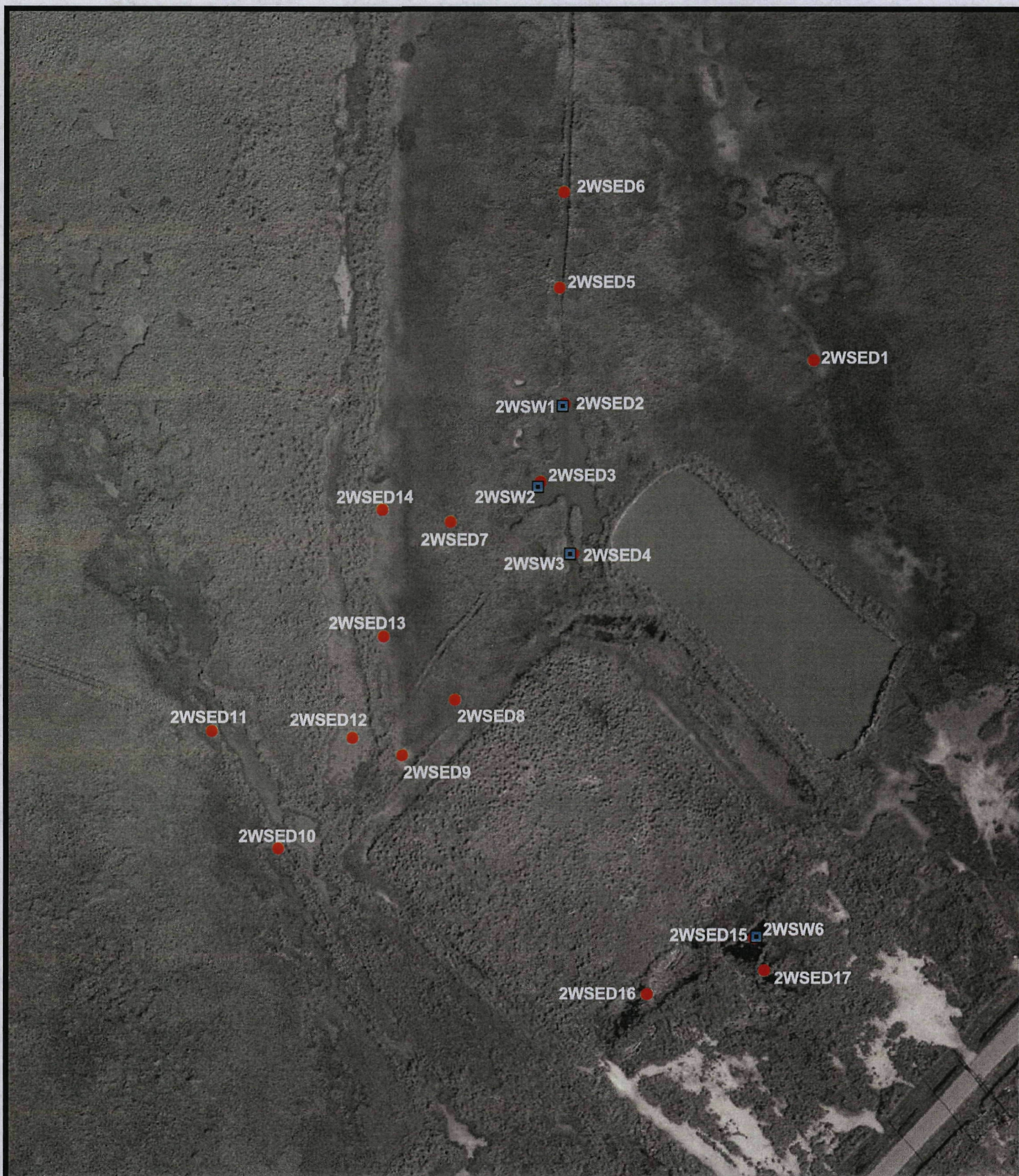
Gulfoo Marine Maintenance
Superfund Site



Project Name: prelim.apr
Date: 01/16/07

Figure 1

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Legend

- Marsh Stations
- Sediment
 - Water

Notes

2004 HGAC

Marsh Sediment and Water Stations
Sampled December 6, 2006

PBW, L.L.C.

Gulfo Marine Maintenance
Superfund Site



Project Name: Field.apr
Date: 01/16/07

Figure 2

M:\05005\008\Arc\field.apr

Gulfoo North Marsh Sediment and Water Sampling Study
January 16, 2007

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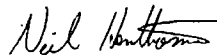
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